



## DESCRIPTION

The 2SB766~ 2SB766A are available in SOT-89 package

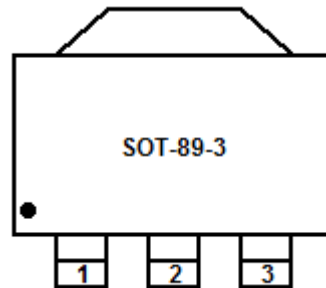
## ORDERING INFORMATION

Package Type	Part Number
SOT-89	2SB766
	2SB766A
Note	SPQ: 1,000pcs/Reel
AiT provides all RoHS Compliant Products	

## FEATURES

- Large collector power dissipation PC
- Mini type package, allowing downsizing of the equipment and automatic insertion through the tape packing and the magazine packing
- Available in SOT-89 package

## PIN DESCRIPTION



1. BASE
2. COLLECTOR
3. EMITTER



## ABSOLUTE MAXIMUM RATINGS

T<sub>A</sub>=25°C

V <sub>CBO</sub> , Collector-Base Voltage	2SB766	-30V
	2SB766A	-60V
V <sub>CEO</sub> , Collector-Emitter Voltage	2SB766	-25V
	2SB766A	-50V
V <sub>EBO</sub> , Emitter-Base Voltage		-5V
I <sub>C</sub> , Collector Current		-1A
I <sub>CP</sub> , Peak Collector Current		-1.5A
P <sub>C</sub> , Collector Power Dissipation		-1W
T <sub>J</sub> , Junction Temperature		150°C
T <sub>STG</sub> , Storage Temperature		-55°C ~150°C

Stresses above may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions beyond those indicated in the Electrical Characteristics are not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

## ELECTRICAL CHARACTERISTICS

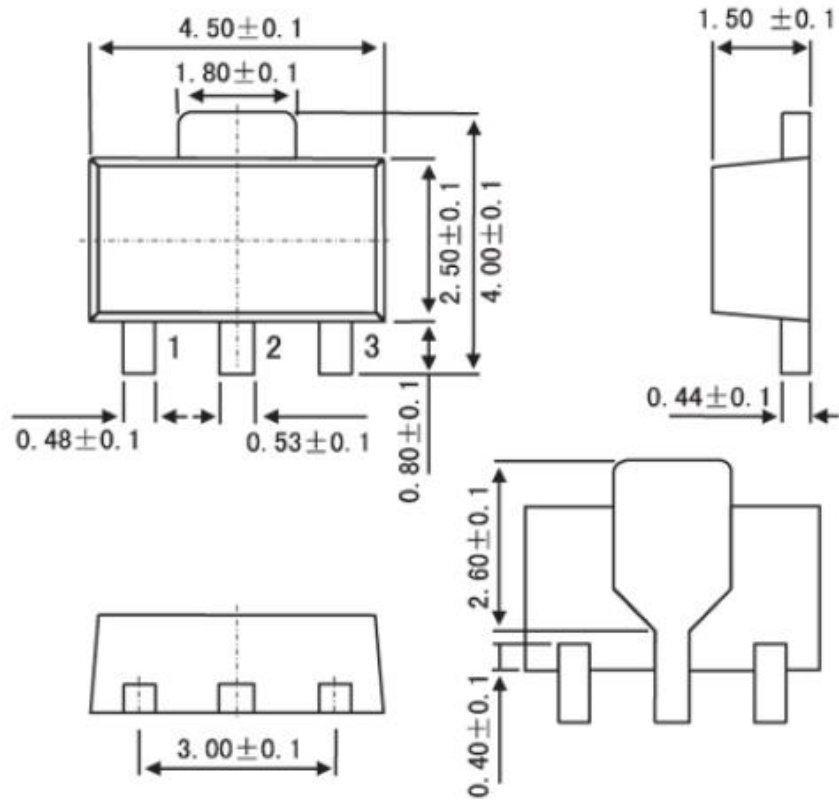
T<sub>A</sub>=25°C

Parameter		Symbol	Conditions	Min.	Typ.	Max.	Unit
Collector-Base Voltage	2SB766	V <sub>CBO</sub>	I <sub>C</sub> =-10μA, I <sub>E</sub> =0	-30			V
	2SB766A			-60			
Collector-Emitter Voltage	2SB766	V <sub>CEO</sub>	I <sub>C</sub> =-2mA, I <sub>B</sub> =0	-25			V
	2SB766A			-50			
Emitter-Base Voltage		V <sub>EBO</sub>	I <sub>E</sub> =-10μA, I <sub>C</sub> =0	-5			V
Collector Cutoff Current		I <sub>CBO</sub>	V <sub>CB</sub> = -20V, I <sub>E</sub> =0			-0.1	nA
Forward Current Transfer Ratio		h <sub>FE</sub>	V <sub>CE</sub> =-10V, I <sub>C</sub> =-500mA	Q	85		170
				R	120		240
				S	170		340
			V <sub>CE</sub> =-5V, I <sub>C</sub> =-1A		50		
Collector- Emitter Saturation Voltage		V <sub>CE(sat)</sub>	I <sub>C</sub> =-500mA, I <sub>B</sub> =-50mA		-0.2	-0.4	V
Base-Emitter Saturation Voltage		V <sub>BE(sat)</sub>	I <sub>C</sub> =-500mA, I <sub>B</sub> =-50mA		-0.85	-1.2	V
Transition Frequency		f <sub>T</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =50mA, f=200MHz		200		MHz
Collector Output Capacitance		C <sub>ob</sub>	V <sub>CB</sub> =-10V, I <sub>E</sub> =0, f=1MHz		20	30	pF



## PACKAGE INFORMATION

Dimension in SOT-89 (Unit: mm)





## IMPORTANT NOTICE

AiT Semiconductor Inc. (AiT) reserves the right to make changes to any its product, specifications, to discontinue any integrated circuit product or service without notice, and advises its customers to obtain the latest version of relevant information to verify, before placing orders, that the information being relied on is current.

AiT Semiconductor Inc.'s integrated circuit products are not designed, intended, authorized, or warranted to be suitable for use in life support applications, devices or systems or other critical applications. Use of AiT products in such applications is understood to be fully at the risk of the customer. As used herein may involve potential risks of death, personal injury, or severe property, or environmental damage. In order to minimize risks associated with the customer's applications, the customer should provide adequate design and operating safeguards.

AiT Semiconductor Inc. assumes to no liability to customer product design or application support. AiT warrants the performance of its products of the specifications applicable at the time of sale.